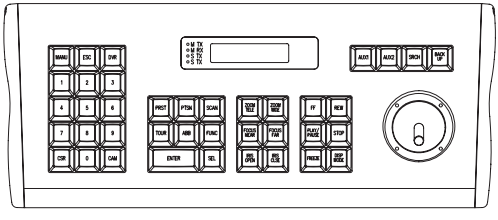
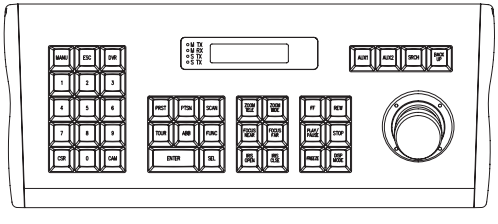
SYSTEM CONTROLLER

TB-CN2R1 (2 AXIS STANDARD)
TB-CN3R1 (3 AXIS STANDARD)
TB-CN3R1W (3 AXIS WEB)

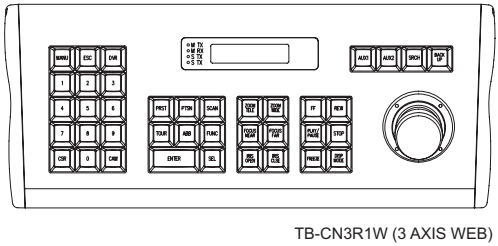
Instruction Manual



TB-CN2R1 (2 AXIS STANDARD)



TB-CN3R1 (3 AXIS STANDARD)



TB-CN3R1W (3 AXIS WEB)

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What's in the Box ?

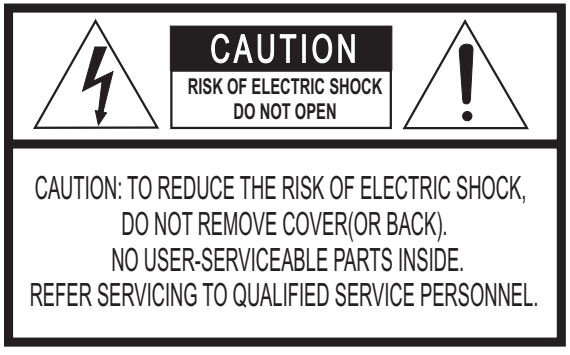
1. Controller
2. Junction Box
3. RJ11 8 Pin Modular Cable 1EA
4. Manual

WARNING & CAUTION

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATIONGRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

FCC COMPLIANCE STATEMENT

INFORMATION TO THE USER : THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION : CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

CE COMPLIANCE STATEMENT

THIS IS A CLASS A PRODUCT. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

GENERAL DESCRIPTIONS

A. GENERAL DESCRIPTIONS

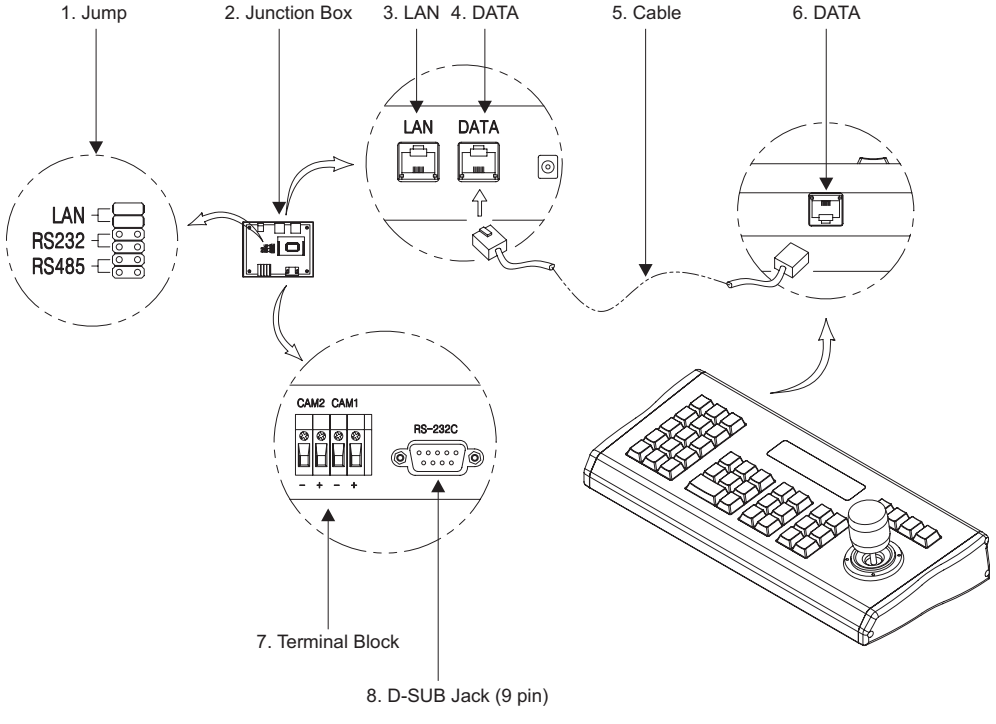
TB-CN2R1, TB-CN3R1(3 AXIS STANDARD) AND TB-CN3R1W(3 AXIS WEB) are pan/tilt controller and it allows operator to use the functions easily.

* This controls camera functions such as pan, tilt, zoom, focus and DVR control.
* This saves and calls camera preset positions.
* Activates pre-programed pattern, auto-scan and group tour function keys.
* The LCD shows display current status as well as provides a menu to set operational parameters.
* This controller is designed for desktop operation and interface connectors are located in the junction box.

B. FEATURES

* Recalls up to 255 cameras from one key board.
* Multi-protocol supported in each cannel (PELCO-D, P)
* Preset position control
* Various manual control speed (1~64 steps)
* Maximum speed is changed according to zoom ratio.
* Recalls programmed guard tours from each dome camera
* Recalls programmed auto-scan from selected dome camera
* Built in LCD Display with blue screen.
* Programmable user preference. (tour, preset, pattern, auto-scan, etc.)
* User password and system hold function
* Supports DVR Protocol (Need to be modified)
* Supports web communication for TX/RX (TB-CN3R1W only)
* Slave Communication to RS232

INSTALLATION



1. lave Setting Jump
2. Junction Box
3. LAN Cable Connection
4. RJ45 Modular Jack (Data Input)
5. Modular Cable - 8pin
   Junction Box to Key Board
6. RJ45 Modular Jack (Data Output)
7. Terminal Block
   (To PTZ Communication Wire)
8. D-SUB Connector
   (To DVR Communication Port)

INSTALLATION

Open the box and check if below all items are included in the box.

- KEY BOARD 1
- JUNCTION BOX 1
- 8P RJ45 MODULAR CABLE (2mm) 1

CONNECTOR

There is one Connector on the Controller, Which Connector is RJ45 For Master Control.

A. Connect RJ45 on the rear of controller and DATA on the junction box and plug in DC 12V power to DC jack.

B. Open the Junction Box cover and set slave interface jumps (LAN,RS232)
Default setting for TB-CN2R1 (2 Axis standard) and TB-CN3R1(3 Axis standard) is by RS-232 and TB-CB3R1W (3 Axis WEB) is by web.

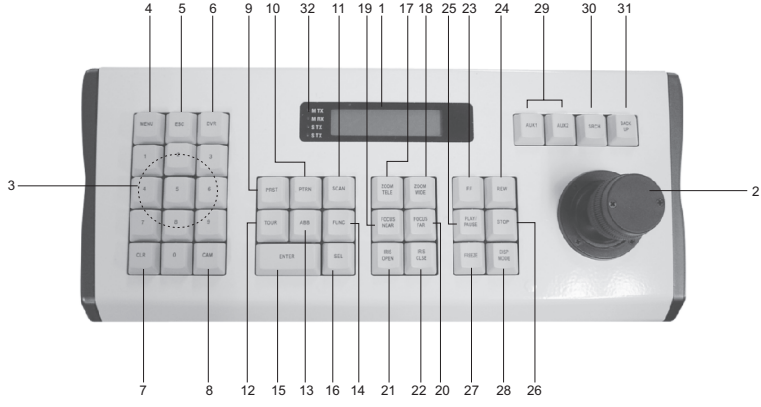
C. Connect CAM1(RS485(+), RS485(-)) on Junction Box Terminal and communication jack on PTZ camera. (Please make sure of polarity)

D. When you use DVR together, in case of TB-CN3R1W, connect LAN on the junction box and LAN cable, In case of TB-CN3R1, connect 9 pin D-SUB Jack

E. Turn on the power and then you will be in starting mode.

PART NAME & FUNCTIONS

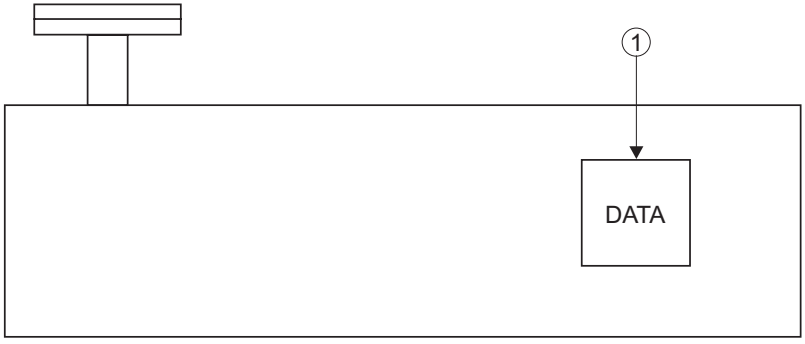
A. PART NAME & FUNCTIONS



1. **LCD Display :** Displays numeric input, system status, function status, general status, etc
2. **Telemetry Joystick :** Allows precise control of Pan/Tilt/Zoom & Moving to menu
3. **0~9 :** Numeric key.
4. **MENU :** Used for Camera (PTZ Camera) and DVR Menu adjustment.
5. **ESC :** closes the current work and goes to starting mode.
6. **DVR :** Selects address of DVR (Up to 255)
7. **CLR :** Cancels key
8. **CAM :** Selects address of camera, Mux, Quad and Matrix Switcher
9. **PRST :** Saves and calls camera presets and positions
10. **PTRN :** Runs to camera pattern key
11. **SCAN :** Runs to Auto-scan key
12. **TOUR :** Runs to Tour key
13. **ABB :** Short key to move to a certain preset easily
14. **FUNC :** Function key
15. **ENTER :** Enter key (DVR)
16. **SEL :** Selects Key (DVR and Key Board setting mode)
17. **ZOOM TELE :** Camera Zoom Control for Tele
18. **ZOOM WIDE :** Camera Zoom Control for Wide
19. **FOCUS NEAR :** Camera Focus Control for NEAR
20. **FOCUS FAR :** Camera Focus Control for FAR
21. **IRIS OPEN :** Camera IRIR Control for OPEN
22. **IRIS CLOSE :** Camera IRIS Control for CLOSE
23. **FF :** DVR FF Key
24. **REW :** DVR REW Key
25. **PLAY/PAUSE :** DVR play and pause key
26. **STOP :** DVR stop Key
27. **FREEZE :** Freeze Key
28. **DISP/MODE :** Select of division mode
29. **AUX1,AUX2 :** Aux On/Off key (of receiver unit)
30. **SEARCH :** DVR search Key
31. **BACK UP :** DVR backup Key
32. **LED :** TXD, RXD Status LED

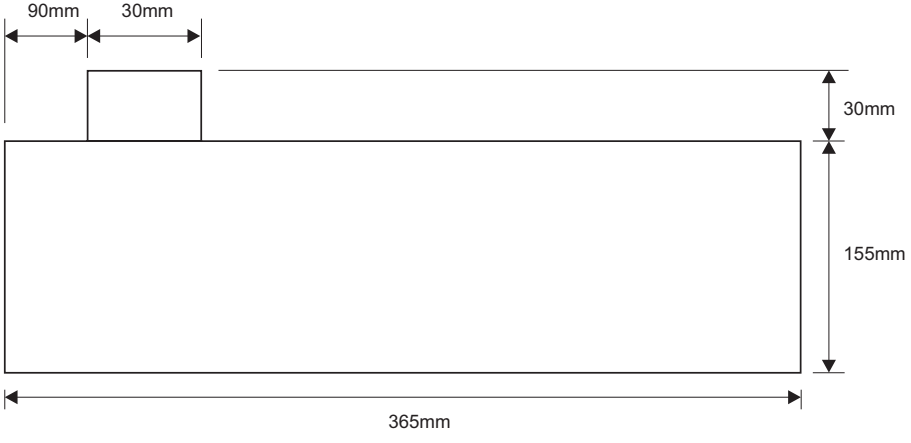
PART NAME & FUNCTIONS

B. PART NAME & FUNCTIONS(REAR SIDE)



① Data out port (connector to communication and Power)

C. DRAWING OF CONSOLE DESK

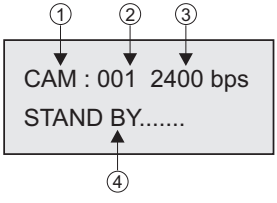


ACCESSING TO THE CAMERA MENU

This function is only for the PTZ camera.

A. DISPLAY LCD WINDOW

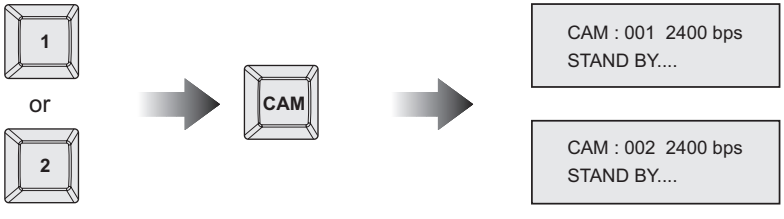
A-1. Initial display



① Show the selected unit (Camera or DVR)
② Show the selected unit address No. (001 ~ 255)
③ Show the selected baud rate (2400/4800/9600 bps)
④ Show the controller status

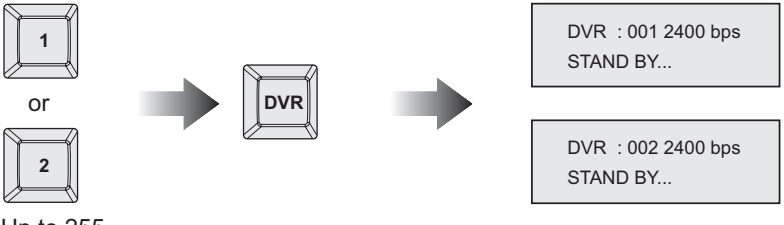
B. How to select address

B-1. How to select address number 1 or 2 of camera.



Up to 255

B-2. How to select address number 1 or 2 of DVR



Up to 255

ACCESSING TO THE CAMERA MENU

C. Easy preset save and calls (in case of cam 1/2400 bps)

C-1. How to save preset 1 or 2

- After pushing no.1 or 2, hold PRST for about 2 seconds)

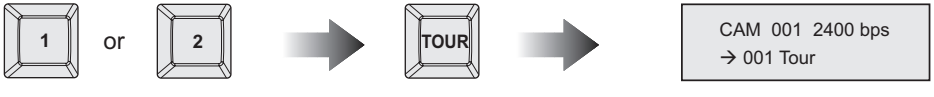
Up to 255

- After pushing no.1 or 2, hold PRST shortly, it makes PRST work.

D. How to use TOUR function

D-1. How to use tour (in case of cam 1/2400 bps)
(You can select 1~ 255, preset position and tour is working when they are stored at cameras.)

- How to use tour



E. How to use PATTERN function

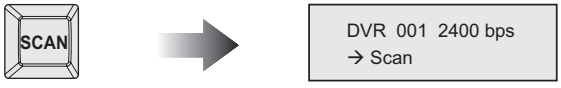
(You can select 1~ 255, preset position and Pattern data is working when they are stored at cameras.)

- How to Pattern run?

ACCESSING TO THE CAMERA MENU

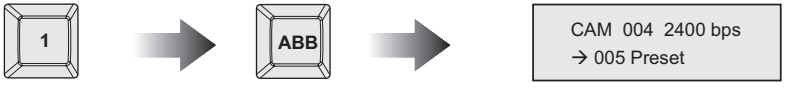
F. How to use AUTOSCAN function

F-1. How to use autoscan



G. How to use ABB Key

- ABB key is a short key to move to a certain preset easily when you use many cameras.
- How to use ABB function.
  ex) In case you stored preset 5 of camera 4 in ABB1.



Up to 255

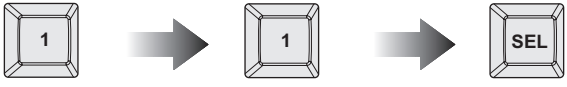
H. How to use FUNCTION Key

- You can use function key from 1~ 255, it is not active now.
- You can use function keys for certain short keys such as DSS, WDR and BLC.....)
- How to use

Up to 255

HOW TO USE SETUP MENU

When you change the setting value of setup menu, you should enter "5. Save and Exit"
How to go to setup menu : After pushing no. key 11, hold SEL key for over 3 seconds).



A. How to use setup menu

A-1. As you move joystick up and down, you can go to next menu, move left and right, you can change the value of setting.

A-2. Starting display in setup menu.

1. Band rate 2400 bps

A-3. How to set the Baud Rate
(You can change the value of baud rate by moving Joystick Left and Right)

1. Band rate 2400 bps	↔	1. Band rate 4800 bps	↔	1. Band rate 9600 bps

A-4. How to change Protocol
(You can change the Protocol by moving Joystick Left and Right)

2. Protocol Tpro201	↔	2. Protocol Pelco-D	↔	2. Protocol Pelco-P

A-5. How to use System Lock function
(You can use 0~999 by no. key, when you input 000, it is OFF, when you input 001~999, Lock mode works)

3. System Lock OFF

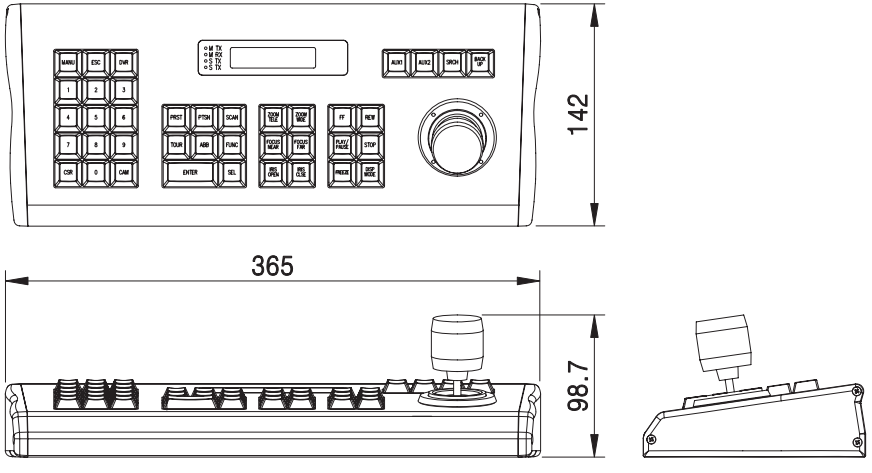
A-6. How to enter Password
(You can use 0~999 by no. key)

4. Password [* * *] * * *

SPECIFICATION

MODEL	TB-CN2R1	TB-CN3R1	TB-CN3R1W
Communication	MASTER : RS485 (2400bps, 4800bps, 9600bps) SLAVE : RS232 (2400bps, 4800bps, 9600bps) LAN : (TB-CN3R1W Only) (2400bps, 4800bps, 9600bps)		
Joystic	2-Axis	3-Axis, Zoom IN/OUT available	
Power Consumption	DC 12V, 110mA		
Display Type	16 x 2 Character LCD, With Blue Backlight		
Key Type	PC Key board Button		
Key board Connector Type	RJ45 8 Pin Modular Cable		
Junction Box Connector	Master : Terminal Block. Slave : 9 Pin D-SUB Connector, 8 Pin Modular		
Humidity	10% ~ 70% non Condensing		
Web	—		Available
Dimension	140(W) x 185(H) x 365(D)		
Weight	1.2kg		

DIMENSIONS



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